

REMARKS

This is a Preliminary Amendment in connection with the above-identified RCE application. This is in response to the Office Action of September 20, 2001 and the Advisory Actions of December 18, 2001 and February 27, 2002.

With this Amendment, the specification is amended at page 16, line 1. The specification has been amended by inserting language from the claims as originally filed. This insertion has changed from the original claims in that the sentences refer to "the slider of above", and use the word "including", for example, to make these new sentences complete. It is believed that this language is fully supported by the original specification based upon the claims as originally filed and entry is respectfully requested.


It is believed that all pending claims 21-34 are fully supported by the amended specification. Consideration and favorable action are respectfully requested.

The Director is authorized to charge any fee deficiency required by this paper or credit any overpayment to Deposit Account No. 23-1123.

Respectfully submitted,

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MARKED-UP VERSION OF REPLACEMENT PARAGRAPHS

Paragraphs for insertion starting at Page 16, line 1:

A slider for supporting transducer elements for a data storage system comprising: a rigid member including opposed leading and trailing edges and opposed upper and lower surfaces, the lower surface including a raised bearing, a trailing edge surface being adapted to support a transducer element; landing pads extending from the raised bearing and adapted to define a contact interface with a disc surface; and at least one pressure relief trench formed in the raised bearing proximate to a contact interface position between the trailing edge of the slider and disc surface, the trench being sized to reduce capillary pressure of the meniscus along the disc surface. The slider of above wherein the slider may include a center rail and the center rail includes a pressure relief trench. The slider of above may include a transversely aligned pressure relief trench. The slider of above wherein the transversely aligned pressure relief trench may be opened at opposed ends thereof to form a through channel. The slider of above may include a longitudinally aligned pressure relief trench. The slider of above may include a sloped pressure relief trench. The slider of above wherein the slider may include a plurality of spaced pressure relief trenches. The slider of above wherein the slider may include opposed side rails and the side rails include a pressure relief trench. The slider of above wherein the longitudinally aligned pressure relief trench may include an opened end. The slider of above wherein the trench may include a depth dimension sized so that separation of the slider and disc at the trench during contact of the slider with the disc surface is equal to or greater than $2R_e$ to balance capillary pressure and disjoining pressure of a lubricant fluid on the disc surface. The slider of above wherein the trench may be sized to provide a slider-disc interface in the toe-dipping regime.

A slider for supporting transducer elements for a data

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storage system comprising: a rigid member including opposed leading and trailing edges and opposed upper and lower surfaces, the lower surface including raised bearing surfaces, the trailing edge being adapted to support a transducer element; landing pads extending from a bearing surface and adapted to define a contact interface with a disc surface; and pressure relief means proximate to a contact interface position between the trailing edge of the slider and disc surface to reduce capillary pressure of the meniscus to limit area of the meniscus. The slider of above wherein the pressure relief means may include at least one trench formed in a bearing surface and extending below a bearing surface. The slider of above wherein the trench may include a depth dimension sized so that separation of the slider and disc at the trench during contact of the slider with the disc surface is equal to or greater than $2R_e$ to balance capillary pressure and disjoining pressure of a lubricant fluid on the disc surface. The slider of above wherein the trench may be sized to provide a slider-disc interface in the toe-dipping regime. The slider of above may include a transversely aligned trench. The slider of above may include a longitudinally aligned trench. The slider of above may include a sloped trench. The slider of above wherein the slider may include opposed side rails and the side rails include a trench. The slider of above wherein the slider may include a center rail and the center rail includes a trench.

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